

AMENDMENT AND RESPONSE TO FINAL OFFICE ACTION
USSN: 09/915,027

REMARKS

This Amendment and Response amends claims 58, 62, 67, and 68 and adds new claims 78 and 79. Claims 58, 60-72, and 75-79 are now pending in the application. No fees are believed due for these amendments; however, the Commissioner is hereby authorized to charge any deficiency or credit any overpayment to Deposit Account 11-0855. Assignee respectfully requests that the Examiner consider the proposed Amendment and remarks below.

I. 35 U.S.C. § 112 Rejections

The Action rejects claims 58, 60-66, 70, 71, 76, and 77 under 35 U.S.C. § 112 as being indefinite. Independent claims 58 and 62 have been amended to address the Action's rejections of claims 58, 60-66, 70, 71, 76, and 77 under 35 U.S.C. § 112, second paragraph. In view of these amendments, Assignee respectfully requests that the Examiner withdraw this rejection.

II. The Anatomy of a Bird and the Invention

Assignee believes that for a true appreciation of the invention, a proper understanding of the anatomy of a bird is important. Like many warm-blooded animals, birds have a layer of fat underneath the belly skin. The layer of belly fat has an arcuate shape similar to that of a spoon without a handle or half of a football. The belly fat layer is primarily fixed in the bird via tissue connections with the belly skin and the stomach of a bird.

The connection of the belly fat layer to the stomach is strong, whereas the connection of the belly fat layer to belly skin is relatively weak. When the stomach is pulled from the

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bird during evisceration, the tissue connection between the belly fat and the skin will break first and the stomach will consequently pull the belly fat layer with it out of the carcass. This results in a package of viscera which includes the belly fat layer and a bird carcass without the belly fat layer. It is an intent of this invention to process the bird prior to evisceration so that at least a part of the belly fat layer remains attached to the carcass after the evisceration process. In this way, the weight of the eviscerated bird can be increased and the benefits of a bird having more fat (tenderness, juiciness, etc.) reaped.

While the belly fat layer could be completely severed from the stomach to accomplish this, such a step is not necessary. The belly fat layer itself is strong as long as it remains intact. In this respect, it is comparable to a piece of paper. As long as the paper is not damaged, the paper will resist a tensile stress. As soon as a cut is created in the paper, however, it will tear relatively easy under a tensile stress. The belly fat layer performs similarly. If tissue connections are broken in the belly fat layer, it will tear further under the influence of tensile stress starting at the location of the broken tissue connections.

As explained above, if there are no broken tissue connections in the belly fat layer, the connection between the belly fat layer and the belly skin will break when the stomach is pulled from the body of the bird during the evisceration process, resulting in the nearly complete removal of the belly fat layer from the bird. However, if, prior to evisceration, tissue connections within the belly fat layer itself are broken, the belly fat layer will tear starting at the location of the broken tissue connections during evisceration. While a part of the belly fat layer connected proximal the stomach will be eviscerated together with the

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viscera, another part of the belly fat layer connected proximal the belly skin will remain behind in the body. If the tissue connections are broken in the belly fat layer near the stomach, the larger portion of the belly fat layer will remain attached to the body. Thus, only the portion of belly fat layer which forms the connection with the stomach will be removed from the body.

This invention is directed to a method and device for weakening the belly fat layer (such as by breaking tissue connections) so that a part of the belly fat layer remains attached to the bird after evisceration. This increases the weight yield of the carcass and consequent price for which the carcass may be sold as well as the tenderness and juiciness of the resulting meat.

III. 35 U.S.C. § 102 Rejections

A. Claims 58, 60-65, 70, 71, 76, and 77

The Action rejects claims 58, 60-65, 70, 71, 76, and 77 under 35 U.S.C. § 102 as being anticipated by Meyn '445 and Koops. Applicants' Assignee respectfully traverses this rejection and requests that it be withdrawn. Claims 58 and 62 respectively recite a method and a device for processing a carcass that is suspended by its legs so that the spine defines a longitudinal axis. Claim 58, from which claims 60, 61, 70, and 76 depend, further recites the step of breaking at least one tissue connection in the belly fat of the carcass by moving a separating means relative to the carcass between the stomach and the skin in a plane which extends substantially perpendicular to the longitudinal axis.

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Claim 62, from which claims 63-65, 71, and 77 depend, recites a separating means that is adapted to enter the carcass and move relative to the carcass between the belly skin and the stomach in a plane which extends substantially perpendicular to the longitudinal axis. Claim 62 further recites that the separating means is not adapted to remove viscera from the carcass.

Meyn '445

Meyn '445 teaches inserting a stretching member 21 downwardly through a vent opening and into the body cavity of the bird (*see* col. 3, lines 55-60). The lower end of stretching member 21 has an enlargement 24 that includes a horizontally extending groove 25 (*see* col. 3, lines 11-13). After the stretching member is inserted into the bird, it is moved radially outward and upward (*see* col. 3, lines 23-27). Through such movement, the enlargement 24 is able to stretch the skin upwardly and outwardly (*see* col. 3, lines 53-65) away from the underlying entrails of the bird. A knife 28 subsequently enters groove 25 and makes a transverse cut in the skin (*see* col. 3, line 68 to col. 4, line 2; col. 4, lines 10-15). This stretching of the skin away from the underlying entrails ensure that the entrails are not damaged during the cutting operation (*see* col. 1, lines 61-67).

The Action analogizes the stretching member 21 with enlargement 24 to the separating means recited in claims 58 and 62. Meyn '445 discloses only two movements of the stretching member 21/enlargement 24 that could even arguably be characterized as being "between the stomach and the skin," as recited in claim 58 and 62. First, stretching member 21/enlargement 24 moves vertically down into the bird. This movement is in a plane that is

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substantially parallel to the longitudinal axis defined by the spine. Second, the stretching member 21/enlargement 24 moves radially outwardly and upwardly, rotating about a horizontal axis (extending out of the page in Fig. 1). While the stretching member 21/enlargement 24 may at times during its rotation move towards a horizontal axis (for example, one parallel to circular support 3), its rotation about a horizontal axis defines a vertical plane in which the stretching member 21/enlargement 24 moves relative to the bird. This vertical plane is substantially parallel to the longitudinal axis defined by the spine of the bird. Only through such movement in a plane substantially parallel to the spine of the bird is the enlargement 24 able to stretch the skin upwardly and outwardly (see col. 3, lines 53-65) away from the underlying entrails of the bird.

However, claims 58 and 62 recite a separating means that moves differently than that of the stretching member in Meyn '445. Both claims 58 and 62 recite a separating means that moves relative to the carcass in a plane substantially perpendicular to the longitudinal axis of the bird defined by the spine. As explained above, Meyn '445 teaches the opposite trajectory for its alleged separating means. In Meyn '445, stretching member 21/enlargement 24 moves in a plane that is substantially parallel to the longitudinal axis of the bird defined by the spine.

For the Meyn '445 device to operate as recited in claims 58 and 62, the stretching member 21 would at least need to rotate about a substantially vertical, not horizontal, axis and thus in a substantially horizontal plane. However, such movement would thwart the '445

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patent's purpose of lifting the skin outwardly away from the underlying entrails to avoid damaging the entrails during cutting:

[a] stretching member ☐ is adapted to be inserted through the circular vent opening into the body cavity of the fowl and ☐ is subsequently moved outwardly to slide under the abdominal skin of the fowl and thus to stretch this skin outwardly away from the underling entrails and towards the cutting means. In this way the cutting means cannot damage the entrails while at the same time the stretched skin allows a sharp straight cut to be made therein.

'445 patent, col. 1, line 61 to col. 2, line 2. Movement of the stretching member in a plane substantially perpendicular to the spine or rotation of the stretching member about an axis substantially parallel to the spine would actually be counterproductive as the skin would be pulled laterally outwardly (instead of upwardly outwardly), thereby drawing the skin tighter across the area of the intended cut and increasing the risk that damage will befall the underlying entrails during cutting.

Koops

Koops is directed to a method and apparatus for eviscerating poultry. An eviscerating means 6 mounted on a carriage 7 is introduced into a bird to be processed. *Koops* explains that traditional eviscerating means move down into a bird and then upwardly to remove the entrails from within the bird. *See* col. 1, lines 10-14. *Koops* notes that this typically results in the entrails or viscera, which remain attached to the bird, hanging down the back of the eviscerated bird. *See generally*, col. 14-42. This can lead to contamination of the outside of the bird. To combat this, *Koops* discloses an eviscerating device and method where the bird is oriented so that its "spine extends substantially horizontally" instead of vertically. Col. 1,

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43-47. In this way, when the viscera package is removed, it will hang vertically downward via gravitational pull and not contact the back of the bird which is retained in a horizontal orientation.

The Action analogizes the eviscerating means 6 to the separating means recited in claims 58 and 62. Koops teaching is limited to an evisceration device. Koops only teaches that an eviscerating means 6 enters and leaves the bird with the viscera. Thus, at most Koops teaches step d) of claim 58 (inserting an eviscerating means into the carcass). It fails to teach or suggest first introducing, moving, and removing a separating means to break at least one tissue connection in the belly fat of the carcass prior to insertion of eviscerating means 6. Thus, operation of the Koops device results in the entire belly fat being removed with the viscera during the evisceration process – a result this invention avoids. Nor can evisceration means 6 be the recited separation means of claim 62 at least because its entire purpose is to remove entrails and viscera from the carcass.

Furthermore, evisceration means 8 does not move as recited in claims 58 and 62. Koops discloses only one movement of the eviscerating means 6 that can even arguably be characterized as movement relative to the bird and “between the stomach and the skin” as recited in claim 58 and 62 – movement of the eviscerating means 6 into the bird. The eviscerating means 6, mounted on carriage 7, moves in a horizontal direction and in a horizontal plane into the bird. *See, e.g.*, col. 1, lines 29-37; col. 2, lines 1-2; col. 4, lines 1-10; Figs. 1 and 2. This horizontal plane is substantially parallel, not substantially

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perpendicular as recited in claims 58 and 62, to the longitudinal axis defined by the horizontally-positioned spine of the bird.

Eviscerating means 6 also rotates about pivot axis 23 as shown in Fig. 1. This movement is related to biasing the eviscerating means 6 such that the operator can adjust the force with which the eviscerating means engages the bird to be processed (which is advantageous when birds of different dimensions are being processed). See col. 5, lines 16-28. However, this rotational movement does not occur in the bird, but prior to entry of the eviscerating means 6 into the bird. Thus, rotation of the eviscerating means 6 cannot be movement "between the skin and the stomach," as recited in claims 58 and 62. Even assuming, *arguendo*, that the eviscerating means 6 rotated about pivot axis 23 after it was in the carcass, such rotation is in a vertical plane that is substantially parallel, not perpendicular, to the longitudinal axis of the horizontally oriented spine.

For at least these reasons, Meyn '445 and Koops fail to teach or suggest the subject matter of claims 58 and 62. These claims are allowable, as are claims 60, 61, 70, and 76, which depend from claim 58, and claims 63-65, 71, and 77, which depend from claim 62.

B. Claim 66

The Action rejects claim 66 under 35 U.S.C. § 102 as being anticipated by Koops. Applicants' Assignee respectfully traverses this rejection and requests that it be withdrawn. At least because claim 66 ultimately depends from claim 62, which, as discussed above, is not anticipated by Koops, Koops also fails to anticipate claim 66.

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C. Claims 67-69, 72 and 75

The Action rejects claims 67-69, 72, and 75 under 35 U.S.C. § 102 as being anticipated by Meyn '679. Applicants' Assignee respectfully traverses this rejection and requests that it be withdrawn.

Meyn '679 discloses a device for eviscerating poultry. Eviscerating means 15 includes a processing member having C-shaped braces 28 and 29 attached at their upper end to rods 20 and 21, respectively, and attached at their lower end to hinge lip 30, which interconnects braces 28 and 29. Col. 5, lines 10-29; Fig. 5. The braces 28, 29 are able to pivot relative to each other, as illustrated in Figs. 1b, 2b, 3b. In use, eviscerating means 15 is introduced into a poultry carcass with the braces 28, 29 positioned compactly together, as shown in Fig. 1b. However, after entry into the bird, the braces 28, 29 are opened as shown in Fig. 3b. In this way, braces 28, 29 are able to avoid contact with, and thus prevent damage to, organs not intended to be removed during the evisceration process while moving through the carcass toward the entrails that are intended to be removed during evisceration. Upon reaching the entrails, the braces 28, 29 move towards each other (as shown in Fig. 1b) to grip the entrails. The eviscerating means 15 is then moved upwards through the bird to remove the entrails, now resting "on the spoon-like lower side of the braces," from the bird carcass. *See generally*, col. 6, lines 53 to col. 7, lines 24.

The Action maintains that rods 20, 21 correspond to the claimed elongated element; C-shaped braces 28 and 29 correspond to the claimed free end of the elongated element; and hinge lip 30, which interconnects braces 28 and 29, corresponds to the claimed stop face.

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Assignee submits that *Meyn* '679 fails to teach or suggest the subject matter recited in claims 67 and 68 for a number of reasons.

First, claims 67 and 68 are respectively directed to a method and a device for breaking at least one belly fat tissue prior to insertion of an eviscerating means into the bird (claim 67) or prior to evisceration of the carcass (claim 68). *Meyn* '679 suffers from the same deficiencies as *Koops* in that it is only directed to an evisceration device and does not teach or suggest a method or device for use prior to evisceration to break at least one tissue connection in the belly fat layer.

Second, braces 28, 29 (the alleged free ends of the alleged elongated elements, rods 20 and 21) do not and cannot rotate away from hinge lip 30, the alleged stop face, as recited in claims 67 and 68. Rather, it is clear that braces 28, 29 are each connected to and rotate about hinge lip 30. In reviewing Figs. 1b and 3b, it can be seen that although ends 28 and 29 spread apart from one another, they both rotate about hinge lip 30 rather than moving away from hinge lip 30. As currently stated, the Examiner's position is akin to suggesting that a doorknob "moves away" from the hinge to which the door is mounted when the door is opened or closed. This simply cannot be the case, since the doorknob, like the outside ends of braces 28 and 29, will always maintain a fixed position relative to the hinge, like hinge lip 30, and never move closer to or further away from the hinge. Thus, braces 28 and 29 do not move away from hinge lip 30 as would be required for *Meyn* '679 to teach the limitation recited in claims 67 and 68 that the free end of the elongated element moves away from the

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stop face. Nor does any other part of eviscerating means 15 move toward or away from hinge lip 30 during the rotation of braces 28, 29 about hinge lip 30.

Third, Meyn '679 fails entirely to teach or suggest a protection element having a stop face adapted for pushing the viscera away from the hole in the skin. The Action maintains that hinge lip 30 corresponds to the claimed stop face. A stop function for hinge lip 30 is simply not disclosed in Meyn '679, and the only function disclosed for hinge lip 30 is a hinge function. Moreover, neither hinge lip 30 nor any other element in Meyn '679 pushes the viscera of the bird away from the hole in the skin. During insertion of the eviscerating means 15, Meyn '679 explains that hinge lip 30 (which interconnects C-shaped braces 28 and 29 at their lower ends) is moved past organs within the carcass to avoid contact with and damage to those organs. Col. 2, lines 21-25; col. 7, lines 1-2. Moreover, even assuming, *arguendo*, that eviscerating means 15 contacted the viscera during insertion to push the viscera away from the hole, as clearly illustrated in Fig. 5, it would be the ends of braces 28, 29 that are proximal hinge lip 30 and positioned below lip 30 that would contact the viscera, as such ends would always be disposed between hinge lip 30 and the viscera. Rather, the only viscera that the hinge lip 30 arguably contacts is that which rests on the spoon-like lower side of the braces 28, 29. Col. 7, lines 15-17. Yet far from being pushed away from the hole in the skin, this viscera is removed by the eviscerating means 15 *through* the hole in the skin.

For the above reasons, claims 67 and 68 are not anticipated by Meyn '679. The Examiner should withdraw the § 102(b) rejections of claims 67 and 68. Inasmuch as dependent claims 69, 72, and 75 depend from and thereby include the limitations of one of

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claim 67 or claim 68, such dependent claims are also not anticipated by *Meyn '679*.

Accordingly, the Examiner should withdraw the § 102(b) rejections of claims 67-69, 72, and 75.

IV. 35 U.S.C. § 103 Rejections

A. Claim 66

The Action rejects claim 66 under 35 U.S.C. § 103 as being unpatentable over *Meyn '445* in view of *Meyn '868*. Applicants' Assignee respectfully traverses this rejection and requests that it be withdrawn. Claim 66 is allowable at least by virtue of its ultimate dependence on allowable claim 62.

B. Claims 67-69, 72, and 75

The Action rejects claims 67-69, 72, and 75 under 35 U.S.C. § 103 as being unpatentable over *Meyn '445* in view of *Meyn '679*. Applicants' Assignee respectfully traverses this rejection and requests that it be withdrawn.

The Action analogizes stretching member 21 to the elongated element and presumably the area of member 21 near enlargement 24 to the recited free end of the elongated element. The Action maintains that groove 25 provided in enlargement 24 is the recited protection element and that enlargement 24 is the recited stop face of the protection element.

However, claims 67 and 68 recite a stop face that is adapted to push the viscera away from the hole in the skin. Enlargement 24 is not adapted to do this. Rather, enlargement 24 is adapted to do the opposite – pull the skin away from the viscera (*see* col. 3, lines 53-65).

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In fact, Meyn '445 does not disclose any structure that pushes the viscera away from the hole in the skin and thus fails to teach a stop face as recited in claims 67 and 68.

Moreover, the Action maintains that stretching member 21 (the alleged elongated element) rotates about vertical axis 2. Regardless of whether this is true, such rotation does not insert the elongated element under the skin, as recited in claims 67 and 68. This is only accomplished by moving stretching member 21 *longitudinally* (not rotationally) into the bird and then rotating stretching member 21 about *horizontal* (not vertical) axis 23. In contrast, rotation about axis 2 merely positions the stretching member 21 above, not in, the bird.

Moreover, the Action acknowledges that "Meyn '445 does not disclose to move the free end of the elongated element away from the stop face" (Action, p. 7), but relies on Meyn '679 to supply this missing element. For the reasons discussed above in Part III.C., Meyn '679 too fails to teach or suggest this recited feature. Thus, when combined, the Meyn references do not result in the claimed subject matter and thus do not render it obvious.

Furthermore, the Action summarily concludes that it would have been obvious to combine Meyn '445 and Meyn '679. In doing so, the Action is engaging in improper hindsight and using Applicants' claims as a template. "When it is necessary to select elements of various teachings in order to form the claimed invention, [one must] ascertain whether there is any suggestion or motivation in the prior art to make the selection made by the applicant." *In re Gorman*, 933 F.2d 982, 986 (Fed. Cir. 1991). No motivation or suggestion exists in Meyn '445 to move the alleged free end of member 21 away from enlargement 24 (the alleged stop face), as recited in claims 67 and 68. However, without

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further explanation, the Action maintains that doing so would "allow for the entrails to be more accurately removed from the carcass." Action, p. 7. Yet the stretching member 21 in Meyn is unrelated to the removal of entrails from the carcass (it is not an evisceration device) and thus this reasoning is nonsensical.

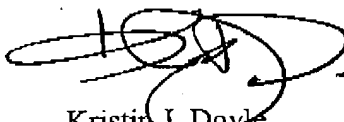
Furthermore, movement of the alleged elongated element (including its alleged free end) away from the alleged stop face of the protection element is impossible given that enlargement 24 is least fixed to (and more likely integrally-formed with) element 21 so as to move in unison and in the same direction with element 21, as clearly seen in FIG. 1.

Because there is absolutely no motivation to combine the teachings of Meyn '445 and Meyn '679 and because, even if combined, they fail to teach the subject matter recited in claims 67 and 68, the fail to render obvious these claims. Claims 67 and 68 are therefore allowable, as is claim 75, which depends from allowable claim 67, and as are claims 69 and 72, which depend from allowable claim 68.

CONCLUSION

Applicant's Assignee respectfully submits that claims 58, 60-72, and 75-79 are in condition for immediate allowance; and requests early notification of their allowance. If there are any matters that can be addressed by telephone, the Examiner is urged to contact the undersigned.

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